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| 09/771,875 | 01/30/2001 | Yoshitomo Kumagai | 1081.1107/JDH | 9019 |

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| EXAMINER | |
|---|---|
| KANG, INSUN | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2193 | |

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/771,875 | KUMAGAI, YOSHITOMO | |
| | Examiner | Art Unit | |
| | Insun Kang | 2193 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *3/17/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,2,4-7,9-11 and 20-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 4-7, 9-11, and 20-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. This action is in response to the RCE amendment filed 3/17/2006.

2. As per applicant's request, claims 1, 6, and 11 have been amended and claims 12-19 have been cancelled, and claims 20-28 have been added. Claims 1, 2, 4-7, and 9-11, 20-28 are pending in the application.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiromichi et al. (JP 07-073011, published 3/17/1995) hereinafter referred to as "Hiromichi."

Per claim 23:

Hiromichi discloses:

-a GUI definition file for said application (page 3 paragraph 0002 and 0004)

-a display device ("graphic display devices," abstract)

- a creating means for rewriting a GUI information of a GUI definition file for the application of said original operating system environment to a target GUI information of a GUI definition file including adding GUI information of a menu status displayed using

the GUI definition file of said original operating system environment to the target GUI definition file to display a created GUI image in said target operating system environment ("When the virtual graphic interface section is prepared ...and drawing environments differ, it is attained by changing only the ...environmental dependence section," page 3 paragraph 0005)

for replacing an original operating system dependent portion of an interface layer of the application in said original operating system environment providing the first platform with a target operating system dependent portion of an interface layer of the application in said target operating system environment providing the second platform to create the application of the target operating system environment transferring the application...environment("When the virtual graphic interface section is prepared ...and drawing environments differ, it is attained by changing only the ...environmental dependence section," page 3 paragraph 0005) as claimed.

Per claim 24:

The rejection of claim 23 is incorporated, and further, Hiromichi teaches:

dependent portions that draw GUI images in a window of a display according to an image instruction of the application by using corresponding GUI definition file ("What it depends for on change of a drawing environment is only the drawing data display module...change of a drawing environment can be coped with only by modification of the drawing data display module," page 5 paragraph 0009) as claimed.

Per claim 25:

The rejection of claim 24 is incorporated, and further, Hiromichi teaches:

-said creating means creates said target GUI definition file from the GUI definition file such that a GUI tool of the target operating system environment displays the GUI images in a window of a display according to a processing of the operating system dependent portion used in said target GUI definition file ("When the virtual graphic interface section is prepared ...and drawing environments differ, it is attained by changing only the ...environmental dependence section," page 3 paragraph 0005) as claimed.

Per claims 20-22, they are the method versions of claims 23-25, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 23-25 above.

Per claim 26:

Hiromichi discloses:

displaying a menu status using graphical user interface files of the application in the first operating system, the first and second operating systems providing different platforms("What it depends for on change of a drawing environment is only the drawing data display module...change of a drawing environment can be coped with only by modification of the drawing data display module," page 5 paragraph 0009) automatically creating and displaying another graphical user interface including a definition file thereof for the application in the second operating system, wherein the graphical user interface files used to display the menu status via the first operating system is added to the definition file created for the application in the second operating system to transfer the application from the first operating system to the second operating system and using the

application within the second operating system ("When the virtual graphic interface section is prepared ...and drawing environments differ, it is attained by changing only the ...environmental dependence section," page 3 paragraph 0005) as claimed.

Per claim 27, it is another method version of claim 23, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 23 above.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 4- 6, 7, 9-11, and 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US Patent 5,956,029), hereinafter referred to as "Okada," in view of Blanton et al. ("Performance of Windows NT Porting Environments," IEEE, 3/1999) hereinafter referred to as "Blanton."

Per claim 1:

Okada discloses:

- displaying a menu status by using an origin GUI definition file for the application in said original operating system environment (i.e. "The picture information ... is triggered by the event from the event acquiring section ... to acquire picture information constituted by logic structure information indicating the configurations of the window displayed on the picture and interactive components such as a menu,

buttons, and the like on the window, layout information indicating the positions and sizes of the interactive components, and attribute information about the captions (item names) and focus states of the interactive components... The picture information ... stores the acquired information in the picture information storage section," col. 4, lines 43-64). See also FIGS. 7A and 7B showing the display picture and the picture information displayed.

- creating a target GUI definition file for the application in said target operating system environment, said original and target operating systems providing different platforms ("When the picture information is acquired, the target point extracting section 113 refers to the target point information in the target point information storage section 114 (step S305) and extracts target point picture information from the picture information stored in the picture information storage section 112," col. 4, lines 51-67, col. 5, lines 1-14; "a user interface conversion method of converting a picture interface provided by an application program running on an operating system having a graphical user interface to generate and provide a new picture interface, comprising the steps of acquiring picture information of the application program in response to, as a trigger, a change in the picture provided by the application program, determining a target point in the acquired picture information, generating converted picture information from the determined target point by referring to conversion template information, and displaying a converted picture in accordance with the generated converted picture information," col 2, lines 32-45; see also col 10, lines 47-65)

- adding GUI information of a menu associated with the status displayed to the target GUI definition file, where the target GUI definition file is used to display the menu in said target operating system environment by using the GUI definition file("When the above conversion is complete, the converted interface control executing section 241 of the converted interface control section 117 in FIG. 5 displays the converted picture on the display of the output unit 104 on the basis of the converted picture information in the converted picture information storage section 116," col 6, lines 18-44).

Okada does not explicitly teach transferring the application from the original operating system environment to the target operating system environment and using the application within the target operating system environment. However, Blanton teaches that Windows as the original operating system and UNIX as the target operating system where porting is expected to be performed were well-known in the art of software development and distribution at the time applicant's invention was made ("A number of software products provide development and operational environments to facilitate the porting of UNIX applications to Windows NT...to minimize the amount of code rewrite for the ported application," abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Okada to transfer the converted picture that is "in accordance with different operation environments and a different users (col. 1 lines 5-17)" so that the GUI application created using Motif library, for example, in UNIX system can be seamlessly used in WINDOWS system. The modification would be obvious because

one having ordinary skill in the art would be motivated to "minimize the amount of code rewrite for the ported [UNIX] application (abstract)" in Windows system as suggested by Blanton.

Per claim 2:

The rejection of claim 1 is incorporated, and further, Okada teaches:

-rewriting an interface layer of the application in said original operating system environment so that said target GUI definition file is read in said target operating system environment ("the component replacement information in the component replacement information storage section 224, and the virtual component addition information in the virtual component addition information storage section 226 to perform information replacement under the control of the converted interface generation control section 201," col 5, lines 15-43; "a user interface conversion method and apparatus which extract only necessary information from original picture information and automatically generating a converted picture without changing an existing application program and requiring the producer of pictures to generate all picture data again," col 2, lines 1-10; see also col 4, lines 10-16) as claimed.

Per claim 4:

The rejection of claim 1 is incorporated, and further, Okada teaches:

- sequentially searching from a parent window to a sub-window of said menu ("When the picture information is acquired, the target point extracting section 113 refers to the target point information in the target point information storage section 114 (step

S305) and extracts target point picture information from the picture information stored in the picture information storage section 112 (step S306). Target point information as reference information designates the sub-tree structure of target interactive components from the tree structure of the picture information. For example, a target application window, a current window, a focused interactive component, and the like can be designated," col 4, lines 51-64; See also Fig 7A-B, Fig 8) and fetching a position and a size of each window in said displayed status ("The stored converted picture information has a tree structure constituted by logic structure information indicating the configurations of the window displayed on the converted picture and interactive components such as a menu and buttons on the window, layout information indicating the positions and sizes of the interactive components, attribute information about the captions (item names) and focus states of the interactive components, and information about links between the interactive components in the picture information and corresponding event," col 5, lines 44-57; col 4, lines 51-64),

- creating the target GUI definition file comprises outputting said fetched position and size of each window and creating the target GUI definition file ("When the above conversion is complete, the converted interface control executing section 241 of the converted interface control section 117 in FIG. 5 displays the converted picture on the display of the output unit 104 on the basis of the converted picture information in the converted picture information storage section 116 (step S312)," col 6, lines 18-44; see also col 7, lines 50-60; col 5, lines 23-57) as claimed.

Per claim 5:

Blanton discloses that the original operating system environment is a UNIX operating system and the different operating system environment is a Windows operating system ("A number of software products provide development and operational environments to facilitate the porting of UNIX applications to Windows NT...to minimize the amount of code rewrite for the ported application," abstract).

Regarding claims 6, 7, 9, and 10, they are the system versions of claims 1, 2, 4, and 5 respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 2, 4, and 5 above.

Regarding claim 11, it is the storage medium version of claims 1 and 6, respectively, and is rejected for the same reasons set forth in connection with the rejection of claims 1 and 6 above.

Per claim 23:

Okada discloses:

-a GUI definition file for said application ("The picture information ... is triggered by the event from the event acquiring section ... to acquire picture information constituted by logic structure information indicating the configurations of the window displayed on the picture and interactive components such as a menu, buttons, and the like on the window, layout information indicating the positions and sizes of the interactive components, and attribute information about the captions (item names) and focus states of the interactive components... The picture information ... stores the acquired

information in the picture information storage section," col 4, lines 43-64);-a display device ("displaying a converted picture in accordance with the generated converted picture information," col. 2 lines 35-45); a creating means for rewriting a GUI information of a GUI definition file for the application of said original operating system environment to a target GUI information of a GUI definition file for the application in said target operating system environment so as to display a created GUI image in said target operating system environment ("When the above conversion is complete, the converted interface control executing section 241 of the converted interface control section 117 in FIG. 5 displays the converted picture on the display of the output unit 104 on the basis of the converted picture information in the converted picture information storage section 116," col 6, lines 18-44) for replacing an original operating system dependent portion of an interface layer of the application in said original operating system environment providing the first platform with a target operating system dependent portion of an interface layer of the application in said target operating system environment providing the second platform to create the application of the target operating system environment ("a user interface conversion method and apparatus which extract only necessary information from original picture information and automatically generating a converted picture without changing an existing application program and requiring the producer of pictures to generate all picture data again," col 2, lines 1-10; see also col 4, lines 10-16)

Okada does not explicitly teach transferring the application from the original operating system environment to the target operating system environment. However, Blanton teaches that Windows as the original operating system and UNIX as the target

operating system where porting is expected to be performed was well-known in the art of software development and distribution at the time applicant's invention was made ("A number of software products provide development and operational environments to facilitate the porting of UNIX applications to Windows NT...to minimize the amount of code rewrite for the ported application," abstract). Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Okada to transfer the converted picture that is "in accordance with different operation environments and a different users (col. 1 lines 5-17)" so that the GUI application created using Motif library, for example, in UNIX system can be seamlessly used in WINDOWS system. The modification would be obvious because one having ordinary skill in the art would be motivated to "minimize the amount of code rewrite for the ported [UNIX] application (abstract)" in Windows system as suggested by Blanton.

Per claim 24:

The rejection of claim 23 is incorporated, and further, Okada teaches: the operating system dependent portions that draw GUI images in a window of a display according to an image instruction of the application by using corresponding GUI definition file (col 5, lines 15-43; col 2, lines 1-10; see also col 4, lines 10-16) as claimed.

Per claim 25:

The rejection of claim 24 is incorporated, and further, Okada teaches:

-said creating means creates said target GUI definition file from the GUI definition file such that a GUI tool of the target operating system environment displays the GUI

images in a window of a display according to a processing of the operating system dependent portion used in said target GUI definition file (col. 5, lines 15-43; col 2, lines 1-10; see also col. 4, lines 10-16) as claimed. Per claims 20-22, they are the method versions of claims 23-25, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 23-25 above.

Per claims 26-28, they are another method versions of claims 1-4, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-4 above.

***Response to Arguments***

**7.** Applicant's arguments filed 3/17/2006 have been fully considered but they are not persuasive.

The applicant states "adding necessary information with GUI definition file of the original application."

In response, the claims merely recite "adding GUI information of a menu." The claims do not recite the "necessary information with GUI definition file" and what they are.

The applicant states: "Unlike Okada that creates a conversion screen using the same function template, the present invention does not require changing definition attributes...because it transfers between operating system."

In response, Although Okada does not explicitly teach actually transferring the application from the original operating system environment to the target operating

system environment, Okada's conversion method is "in accordance with different operation environments and a different users...without changing an original application program (col. 1 lines 5-17)." If applicant means anything more, this must be brought out in the claims to further clarify the invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 571-272-3724. The examiner can normally be reached on M-F 7:30-4 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 571-272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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